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Reply to October 23, 2007 Action

REMARKS/ARGUMENTS

This Amendment is in response to the Office Action mailed October 23, 2007 in the above-identified application. Based on the foregoing amendments and the following remarks, careful reconsideration and allowance of the application are respectfully requested.

Claims 1-7 and 9-32 are pending in this application. By this Amendment, claims 1 and 27 have been amended to more particularly point out the invention. These amendments can be readily supported by at least paragraphs 0010 and 0024 of Applicant's U.S. Patent App. Pub. No. 2002/0113375.

In the Office Action dated October 23, 2007, Examiner rejected claim 1-7 and 9-32 under 35 U.S.C. 102(b) as being anticipated by Hubler (U.S. Pat. No. 3,666,276). Examiner stated that in the previous response, Applicant "has not claimed to eliminate or stop fluid flow just resist fluid flow which is done in Hubler." Applicant respectfully submits that amended claims 1 and 27 now overcome the Hubler reference. Applicant's amended claim 1 now requires "a shaft seal having a sealing portion and a support portion, the sealing portion disposed on the shaft to prevent movement of fluid between the shaft seal and the shaft." Applicant's amended claim 27 now requires "the sealing member disposed on the shaft to prevent movement of fluid between the sealing member and the shaft."

Applicant respectfully submits that Hubler is a "device affording a moderate leakage" (abstract), contrary to Applicant's claims where the shaft seal or sealing member is "disposed on the shaft to prevent movement of fluid between" the shaft seal or sealing member and the shaft. Examiner admitted in the October 23, 2007 Office Action that "Applicants' argument that the invention of Hubler is adapted to leak is correct but is adapted to leak only one fluid while maintaining a seal for the other fluid."

In Hubler, the "moderate leakage" is used "constitute a protective barrier in case, for example, the outer ambient atmosphere or the inner atmosphere of the casing contains a noxious gas." Col. 1, lines 12-16. There is a "flow of fluid produced through said clearance as a consequence of the pressure differential prevailing on either side." Col. 1, lines 21-23. "[T]his casing contains an innocuous neutral fluid that can therefore be allowed to be exhausted to the atmosphere surrounding this casing without any inconvenience, as a result of the moderate or

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limited leakage constituting a characteristic feature of the device of this invention.” Col. 2, lines 12-16, emphasis added.

While Hubler discloses that clearance between the shaft and socket “can be reduced to a minimum value in order to limit the fluid leakage around the rotary shaft” (col. 1, lines 59-62), Hubler does not disclose an apparatus with a shaft seal or sealing member “disposed on the shaft to prevent movement of fluid between” the shaft seal or sealing member and the shaft as required by Applicant’s claims 1 and 27. Even if the clearance is minimized, “[t]he clearance thus provided will allow a limited or moderate fluid leakage to take place.” Col. 3, lines 1-2. “[T]his casing encloses a neutral fluid adapted to leak to the outside in order to constitute a protective barrier against a corrosive, radio-active or noxious fluid contained in the ambient atmosphere or in an enclosure containing said casing.” Col. 3, lines 36-40.

Furthermore, Hubler may disclose “this arrangement also permits of retaining this socket 3a when it tends to move in the opposite direction, for example when performing tests for determining the fluid tightness of the assembly, by creating a vacuum in chamber P1.” Col. 4, lines 38-41. However, merely creating a vacuum in chamber P1 does not teach a shaft seal or sealing member “disposed on the shaft to prevent movement of fluid between” the shaft seal or sealing member and the shaft as required by Applicant’s claims 1 and 27. Even if a vacuum is created in chamber P1, the Hubler device merely does this for “determining the fluid tightness of the assembly.” Col. 4, lines 40-41. Hubler emphasizes as one of its “advantageous features” a “provision of a very moderate leakage of constant value.” Col. 5, lines 8-16. Thus, this does not disclose an apparatus with a shaft seal or sealing member “disposed on the shaft to prevent movement of fluid between” the shaft seal or sealing member and the shaft as required by Applicant’s claims 1 and 27.

Therefore, in light of the previous arguments, Applicant respectfully submits that Hubler does not teach all the limitations of amended claims 1 and 27.

Examiner also stated regarding “being configured . . . the shaft” in claims 1 and 27, that “a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.” Applicant respectfully submits that all limitations must be included in reading the claim. All words in a claim must be considered when judging patentability of a claim. *In re Wilson*, 424 F.2d 1382 (CCPA 1970); MPEP 2143.03. “There is nothing inherently

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wrong with defining some part of an invention in functional terms." MPEP 2173.05(g). "A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used." MPEP 2173.05(g). These sorts of limitations may be allowed when they, for example, "serve to precisely define present structural attributes of interrelated component parts of the claimed assembly." MPEP 2173.05(g); *see In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976). Here, the limitations of claims 1 and 27 define the configuration of the shaft seal or sealing member such that it maintains a vacuum seal about the shaft. This limitation cannot be ignored and must be given weight in determining patentability. *In re Attwood*, 354 F.2d 365 (CCPA 1966) ("We have here a combination claim and the limitations ignored by the board as use limitations we think are functional expressions which must be given weight.").

However, even if this language is treated as intended use by the Examiner, Applicant's amended claims 1 and 27 now require a shaft seal or sealing member "disposed on the shaft to prevent movement of fluid between" the shaft seal or sealing member and the shaft. This language is a structural difference between the claimed invention and the prior art.

Accordingly, Applicant respectfully submits that in light of the foregoing claim amendments and remarks, all of the presently pending claims are in condition for allowance. Claims 2-7 and 9-26 depend from claim 1 and are allowable for at least the same reasons. Claims 28-32 depend from claim 27 and are also allowable for at least the same reasons. Reexamination and reconsideration are respectfully requested and early allowance is earnestly solicited. In the event the Examiner deems personal contact desirable in disposition of this application, the Examiner is respectfully requested to call the undersigned. Please charge any additional fees or credit any overpayments to deposit account No. 50-0896.

Respectfully submitted,  
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